



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,031	12/09/2003	Toshiharu Oishi	107156-00216	3017

7590 12/15/2005  
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC  
Suite 600  
1050 Connecticut Avenue, N.W.  
Washington, DC 20036-5339

EXAMINER

HODGES, MATTHEW P

ART UNIT	PAPER NUMBER
----------	--------------

2879

DATE MAILED: 12/15/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

E/L

<b>Office Action Summary</b>	<b>Application No.</b> 10/730,031	<b>Applicant(s)</b> OISHI ET AL.	
	<b>Examiner</b> Matt P. Hodges	<b>Art Unit</b> 2879	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.  
 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 and 16-21 is/are rejected.
- 7) ☒ Claim(s) 15 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 09 December 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
 a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>6/7/2004</u> . | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Specification***

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 17 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically it is unclear to the examiner what units of foam hardness are used. As several scales exist for the measurement of hardness in materials it is unclear to which test the "30 degrees" is referring.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this

Art Unit: 2879

subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-7, 16, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Yoshikawa et al. (US 6,255,778).

Regarding claims 1 and 2, Yoshikawa discloses (see figure 1) a flat panel device including a PDP unit (20) and a protective sheet formed on the PDP unit. The protective sheet further includes a light antireflection layer (6), an infrared-radiation absorbing and color-tone correcting layer (5), and an electromagnetic-wave blocking layer (3). The layers are bonded to the PDP by means of an adhesive layer (4c).

Regarding claim 3, Yoshikawa further discloses the use of an acrylic adhesive layer. (Column 8 lines 55-60).

Regarding claims 4, 5 and 20, Yoshikawa further discloses the use of EVA, which has an index of refraction of approximately 1.5, for the adhesive layer. This is substantially equal to the glass substrate of the PDP.

Regarding claim 6, the adhesive strength is a product of the material used for the adhesive. In this instance, Yoshikawa discloses adhesives which can be peeled away depending on the force applied and method of peeling.

Regarding claim 7, Yoshikawa further discloses the filter layer has a thickness of greater than 0.5mm. (Column 7 lines 45-65).

Regarding claim 16, Yoshikawa further discloses (see figure 1) a chassis member (7) that interpositions an adhesive member that is optionally made from foam polymer. (Column 6 lines 51-61).

Art Unit: 2879

Regarding claim 18, the chassis member is included around all edges of the color filter and holds the color filter against the front of the PDP. (Column 6 lines 21-27).

Regarding claim 19, Yoshikawa further discloses the use of a rubber seal material between the chassis and the electromagnetic-wave blocking layer. (Column 6 lines 30-35).

Claims 1-11, and 20 are rejected under 35 U.S.C. 102(e) as being anticipated by Wachi et al. (US 2003/0085649 A1).

Regarding claims 1 and 2, Wachi discloses (see figure 2) a flat panel device including a PDP unit (2) and a protective sheet formed on the PDP unit. The protective sheet further includes a light antireflection layer (6), an infrared-radiation absorbing and color-tone correcting layer (9), and an electromagnetic-wave blocking layer (15). The layers are bonded to the PDP by means of an adhesive layer (2a).

Regarding claim 3, Wachi further discloses the use of a silicon adhesive layer. (Paragraph 0054).

Regarding claims 4, 5 and 20, Wachi further discloses the use of EVA, which has an index of refraction of approximately 1.5, for the adhesive layer. This is substantially equal to the glass substrate of the PDP. (Paragraph 0054)

Regarding claim 6, the adhesive strength is a product of the material used for the adhesive. In this instance, Wachi discloses adhesives which can be peeled away depending on the force applied and method of peeling.

Regarding claim 7, Wachi further discloses the filter layer has a thickness of greater than 0.5mm. (Paragraph 0054).

Art Unit: 2879

Regarding claim 8, Wachi further discloses (see figure 2) the use of the layers above in the order claimed, and further where the EM-wave blocking layer is formed on the side of the filter next to the PDP.

Regarding claims 9-11, Wachi further discloses the use of a EM-wave blocking layer that has an area larger than the other two filter layers. This results in a recess formed in the top two layers above the exposed EM-wave blocking layer. Further the EM-wave blocking layer is grounded at this location. (See figure 2).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshikawa et al. (US 6,255,778) in view of Yasunori et al. (US 6,417,619).

Regarding claims 12-14, Yoshikawa discloses the device as claimed (see rejection of claim 9 above) but does not appear to specify the use of a dark coloring on the conductive mesh, however Yasunori, in the same field of endeavor, discloses the use of darkening the conductive mesh of an EM-wave blocking layer for a PDP in order to advantageously improve contrast by reducing flicker or glare. (Column 8 lines 40-45). Thus, it would have been obvious at the time the invention was made to a person having ordinary skills in the art to incorporate the black

Art Unit: 2879

coloring on the conductive mesh as taught by Yasunori into the device as disclosed by Yoshikawa in order to advantageously Yoshikawa.

Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yoshikawa et al. (US 6,255,778)

Regarding claim 21, Yoshikawa discloses the claimed invention (see rejection of claim 20 above) but does not appear to specify the limitation of a luminance of the panel after a non-display discharge being less than or equal to  $1 \text{ cdm}^2$ . However, It has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In this case, it is well established that to improve contrast, with respect to reflected light, the filter layer should be made less transmissive until the desired darkest transmittance is established. Thus, it would have been obvious to one of ordinary skills in the art at the time the invention was made to decrease transmittance of the filter layer until the non-display discharge has a luminance of less than or equal to  $1 \text{ cdm}^2$ , since discovering an optimum value of a result variable is considered within the skills of the art.

#### ***Allowable Subject Matter***

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter:

Art Unit: 2879

Regarding claim 15, the references of the Prior Art of record fails to teach or suggest the combination of the limitations as set forth in claim 15, and specifically comprising the limitation of a flat panel display with a EM-wave blocking filter that extends outwards from other filter layers, is black colored, and includes registration marks.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Oh (US 2004/0113533) discloses the use of a filter formed on the PDP and held by the device chassis.

Koike et al. (US 6,965,191) discloses the use of a filter formed on the PDP.

### ***Contact Information***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matt P Hodges whose telephone number is (571) 272-2454. The examiner can normally be reached on 7:30 AM to 4:00 PM M-F.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nimesh Patel can be reached on (571) 272-2457. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.



Art Unit: 2879

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

mph 

  
NIMESHKUMAR D. PATEL  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2800